



Project Updates

Highlights from selected projects

STATE PLANNING AND RESEARCH (SPR) PROJECTS

SPR 543 – STRATEGIES TO INTEGRATE ENVIRONMENTAL STEWARDSHIP INTO ADOT'S BUSINESS

About two years ago, Environmental Stewardship was highlighted by the Arizona Department of Transportation (ADOT) Core (Management) Team as one of the Department's strategic challenges, and subsequently identified as one of three priority areas requiring related research efforts. In July 2002 ADOT and the American Association of State Highway and Transportation Officials (AASHTO) signed a Joint Project Agreement awarding the lead research role to the AASHTO Center for Environmental Excellence.

The research includes the following steps.

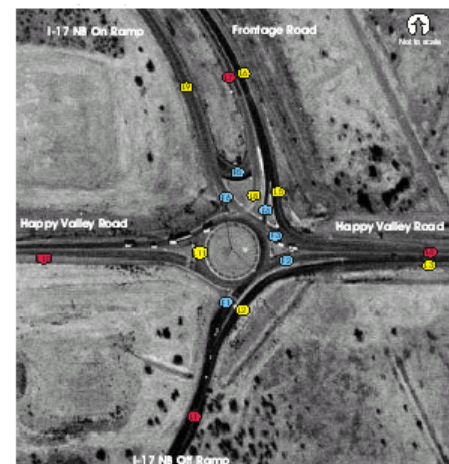
- Evaluating the environmental performance of ADOT's business practices across all its divisions, and for all modes of transportation under its jurisdiction.
- Establishing priority areas of high environmental opportunity or risk.
- Documenting the results of the evaluation and prioritization in technical memoranda
- Making recommendations to ADOT.

The objective of the evaluations is to qualitatively assess the environmental performance of ADOT and to identify opportunity areas for further integrating environmental stewardship into ADOT's transportation business practices.

SPR-545, Evaluation of Roundabout Options for ADOT

The roundabouts controlling traffic at the I-17/Happy Valley Road interchange represent Arizona's first application of modern roundabout traffic control in this manner. The construction of roundabouts at this interchange location served to alleviate past congestion and safety issues by reducing off-ramp queues and reducing speeds in the area of the I-17 off-ramp termini. The use of the roundabouts offered flexibility in addressing the complicated traffic interactions of the freeway on- and off-ramps, two-way frontage roads, and Happy Valley Road.

The I-17/Happy Valley Road roundabouts were studied to help identify possible improvements that could be incorporated at this location and into future ADOT roundabout initiatives. The anticipated benefits of the improvements include more efficient traffic operations, reduced average costs, increased capacity, and improved safety (due to overall slower speeds through the roundabout). The completed research included recommended improvements for the existing roundabouts involving geometric, striping, and signing modifications. Also, the research project culminated in Guidelines for the Selection, Evaluation, and Design of Roundabouts which provide details on the facets of roundabout use as it relates to Arizona.



Count Locations – East Roundabout

ATRC UPDATE

ATRC is expanding its information outreach efforts to ADOT Districts. Presentations were made to the Flagstaff and Kingman Districts during December 2003, with more District and department presentations scheduled for 2004. The focus of these presentations is informing ADOT staff about the services and research funding available through ATRC. The funding process is also discussed along with specific questions or research needs of the participants. Groups interested in scheduling a presentation are encouraged to contact ATRC manager, Frank Darmiento (tel: 602-712-3134, e-mail: fdarmiento@dot.state.az.us).

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